Nuclear Instruments and Methods in Physics Research B 86 (1994) 401–406
North-Holland

NIM B
Beam Interactions with Materials & Atoms

Author index

Al-Mashhadani, E.M., see Sadowski, M. 86 (1994) 311
Alexiev, D., K.S.A. Butcher, M. Edmondson and T.L. Tansley, Neutron transmutation doping of liquid phase epitaxial gallium arsenide 86 (1994) 288
Aloupogiannis, P., see Delbrouck-Habaru, J.M. 86 (1994) 394
Angert, N., see Apel, P. 86 (1994) 325
Apel, P., N. Angert, W. Brüchle, H. Hermann, U. Kampschulte, P. Klein, L.I. Kravets, Yu.Ts. Oganessian, G. Remmert, R. Spohr, T. Steckenreiter, C. Trautmann and J. Vetter, Solvent induced track sensitization. Extraction of oligomers 86 (1994) 325
Artigaud, S., see Poumellec, B. 86 (1994) 279
Awaya, Y., see Oura, M. 86 (1994) 190

Barrachina, R., see Pregliasco, R.G. 86 (1994) 168
Barrachina, R.O., see Garibotti, C.R. 86 (1994) 96
Barrachina, R.O., see Pregliasco, R.G. 86 (1994) 390
Beer, J., see Vojtyla, P. 86 (1994) 380
Belkić, Dž., Double charge exchange at high impact energies 86 (1994) 62
Belkić, Dž., Post-collisional interaction in ion–atom collisions 86 (1994) 127
Bell, F., On the multiple scattering of linearly polarized gamma rays 86 (1994) 251
Benhenni, M., S.M. Shafroth and J.K. Swenson, Alignment effects in fast ion–atom collisions 86 (1994) 28
Berényi, D., see Závodszky, P.A. 86 (1994) 175
Berényi, D., see Plano, V.L. 86 (1994) 181
Bernardi, G., see Suárez, S. 86 (1994) 172
Bernardi, G., see Suárez, S. 86 (1994) 197
Bernasconi, G., N. Haselberger, A. Markowicz and V. Valkovic, Applications of a capillary based X-ray microfluorescence system 86 (1994) 333
Bichsel, H., see Pfützner, M. 86 (1994) 213
Bielajew, A.F., Plural and multiple small-angle scattering from a screened Rutherford cross section 86 (1994) 257
Biryukov, V.M., Yu.A. Chesnokov, N.A. Galyaev, V.I. Kotov, I.V. Narsky, S.V. Tsarik, V.N. Zapolsky, O.L. Fedin, M.A. Gordeeva, Yu.P. Platonov and A.I. Smirnov, On measuring 70 GeV proton dechanneling lengths in silicon crystals (110) and (111) 86 (1994) 245
Bozoian, M., Pascal's triangle and the simulation of backscattering spectra 86 (1994) 367
Braziewicz, J., see Semaniak, J. 86 (1994) 185
Brenn, R., see Samlenski, R. 86 (1994) 339
Brohm, T., see Pfützner, M. 86 (1994) 213
Brüchle, W., see Apel, P. 86 (1994) 325
Bumai, Yu.A., see Shlopak, N.V. 86 (1994) 298
Butcher, K.S.A., see Alexiev, D. 86 (1994) 288

Černý, F., see Zemek, J. 86 (1994) 293
Cesareo, R., see Rao, D.V. 86 (1994) 219
Chesnokov, Yu.A., see Biryukov, V.M. 86 (1994) 245
Clouvas, A., see Tobisch, M. 86 (1994) 143
Clouvas, A., see Suárez, S. 86 (1994) 197
Composto, R.J., see Genzer, J. 86 (1994) 345
Cornelis, R., see Parent, M. 86 (1994) 355
Cravero, W.R., C.R. Garibotti and G. Gasaneo, Parametric analysis of the soft electron emission in ion–helium collisions 86 (1994) 140
Czyżewski, T., see Semaniak, J. 86 (1994) 185
Czyżewski, T., see Sadowski, M. 86 (1994) 311

0168-583X/94/$07.00 © 1994 – Elsevier Science B.V. All rights reserved

Dams, R., see Parent, M. 86 (1994) 355
Delbrouck-Habaru, J.M., G. Weber, P. Aloupogiannis, G. Robaye and I. Roelandts, Erratum to: "Determination of the best experimental conditions for using the α parameters method to calculate matrix corrections for infinitely thick targets (TTPIXE)". [Nucl. Instr. and Meth. B 73 (1993) 71] 86 (1994) 394
Dewaele, J., see Parent, M. 86 (1994) 355
DuBois, R.D. and S.T. Manson, The influence of projectile electron–target electron interactions on electron emission in fast ionizing collisions 86 (1994) 161
Duraud, J.P., see Traverse, A. 86 (1994) 270

Edmondson, M., see Alexiev, D. 86 (1994) 288

Fedin, O.L., see Biryukov, V.M. 86 (1994) 245
Feng, Y., Z. Zhou, Y. Zhou and G. Zhao, Cross sections for 165° backscattering of 2.0–9.0 MeV ^{4}He from carbon 86 (1994) 225
Fiedler, C., see Tobisch, M. 86 (1994) 143
Fiedler, C., see Jung, M. 86 (1994) 194
Flank, A.M., see Traverse, A. 86 (1994) 270
Focke, P., see Suárez, S. 86 (1994) 172
Focke, P., see Suárez, S. 86 (1994) 197
Fontaine, A., see Traverse, A. 86 (1994) 270
Ford, A.L., see Reading, J.F. 86 (1994) 38
Fritsch, W., see Lin, C.D. 86 (1994) 12
Fukumura, K., A. Nakanishi and T. Kobayashi, Hydrogen-filled proportional counter operated at low temperatures and its application to CEMS 86 (1994) 387

Galyaev, N.A., see Biryukov, V.M. 86 (1994) 245
Garibotti, C., see Suárez, S. 86 (1994) 172
Garibotti, C.R. and R.O. Barrachina, Continuum states in ion–atom collisions 86 (1994) 96
Garibotti, C.R., see Cravero, W.R. 86 (1994) 140
Garibotti, C.R., see Pregliasco, R.G. 86 (1994) 168
Gasaneo, G., see Cravero, W.R. 86 (1994) 140
Gautier, M., see Traverse, A. 86 (1994) 270
Gayet, R. and J. Hanssen, Resonant and non-resonant modes of transfer and excitation processes in ion–atom collisions 86 (1994) 52
Gayet, R., J. Hanssen, A. Martinez and R. Rivarola, Double electron capture in ion–atom collisions at high impact velocities 86 (1994) 158
Geissel, H., see Pfützner, M. 86 (1994) 213
Genzer, J., J.B. Rothman and R.J. Composto, Improved hydrogen and deuterium depth profiling in polymers using low energy forward recoil spectrometry 86 (1994) 345
Gigante, G.E., see Rao, D.V. 86 (1994) 219
Głowacka, L., see Semaniak, J. 86 (1994) 185
Głowacka, L., see Sadowski, M. 86 (1994) 311
Gordeeva, M.A., see Biryukov, V.M. 86 (1994) 245
Groeneveld, K.O., see Tobisch, M. 86 (1994) 143
Groeneveld, K.O., see Jung, M. 86 (1994) 194
Groeneveld, K.O., see Suárez, S. 86 (1994) 197
Gulyás, L., see Závodszky, P.A. 86 (1994) 175

Haar, R.R., see Plano, V.L. 86 (1994) 181
Hall, K.A., see Reading, J.F. 86 (1994) 38
Haller, M., see Semaniak, J. 86 (1994) 185
Hanssen, J., see Gayet, R. 86 (1994) 52
Hanssen, J., see Gayet, R. 86 (1994) 158
Haselberger, N., see Bernasconi, G. 86 (1994) 333
Hashemi-Nezhad, S.R., Determination of the energy limits and efficiency of track detectors for the formation of etched through tracks 86 (1994) 303
He, Y.D., see Westphal, A.J. 86 (1994) 317
Hermann, H., see Apel, P. 86 (1994) 325
Hervo, J., see Poumellec, B. 86 (1994) 279
Hock, G., see Mukoyama, T. 86 (1994) 155
Hock, G., see Tökési, K. 86 (1994) 201

Hofmann, D., see Tobisch, M. 86 (1994) 143
Hofmann, D., see Jung, M. 86 (1994) 194
Hsu, C.C. and Y.C. Yu, Shape studies of ELC and ECC cusps 86 (1994) 90

Itoh, Y., see Oura, M. 86 (1994) 190

Jakubaßa-Amundsen, D.H., The importance of continuum eigenstates in electron spectroscopy 86 (1994) 82
Jaskóła, M., see Semaniak, J. 86 (1994) 185
Jaskóła, M., see Sadowski, M. 86 (1994) 311
Jung, M., M. Schosnig, K. Kroneberger, M. Tobisch, R. Maier, M. Kuzel, C. Fiedler, D. Hofmann and K.O. Groeneveld, Charge state analysis of heavy ions after penetration of uncleaned and sputter cleaned conducting surfaces 86 (1994) 194
Jung, M., see Tobisch, M. 86 (1994) 143
Jung, M., see Suárez, S. 86 (1994) 197

Kabachnik, N.M., New trends in the study of alignment and orientation in ion–atom collisions 86 (1994) 20
Kampschulte, U., see Apel, P. 86 (1994) 325
Karschnick, R., see Semaniak, J. 86 (1994) 185
Kerkow, H., V.P. Petukhov, E.A. Romanowski and R. Stolle, Convoy electron and ion scattering distributions after penetration of protons through thin foils 86 (1994) 205
Khemliche, H., see Plano, V.L. 86 (1994) 181
Kimura, M., see Oura, M. 86 (1994) 190
Klein, P., see Apel, P. 86 (1994) 325
Kobayashi, T., see Fukumura, K. 86 (1994) 387
Kobzev, A.P., see Semaniak, J. 86 (1994) 185
Koizumi, T., see Oura, M. 86 (1994) 190
Kojima, T.M., see Oura, M. 86 (1994) 190
Kotov, V.I., see Biryukov, V.M. 86 (1994) 245
Kravets, L.I., see Apel, P. 86 (1994) 325
Kravis, S., see Oura, M. 86 (1994) 190
Kretschmer, W., see Semaniak, J. 86 (1994) 185
Kroneberger, K., see Tobisch, M. 86 (1994) 143
Kroneberger, K., see Jung, M. 86 (1994) 194
Kumagai, H., see Tawara, H. 86 (1994) 135
Kuzel, M., see Tobisch, M. 86 (1994) 143
Kuzel, M., see Jung, M. 86 (1994) 194

Lin, C.D., N. Toshima and W. Fritsch, Alignment and orientation in atomic collisions 86 (1994) 12
Lindroth, E., see Reading, J.F. 86 (1994) 38
Luo, P.-A., see Wang, D.-C. 86 (1994) 231

Maier, R., see Tobisch, M. 86 (1994) 143
Maier, R., see Jung, M. 86 (1994) 194
Maier, R., see Suárez, S. 86 (1994) 197
Manson, S.T., Observations on fast ion–atom collisions 86 (1994) 210
Manson, S.T., see DuBois, R.D. 86 (1994) 161
Markowicz, A., see Bernasconi, G. 86 (1994) 333
Martinez, A., see Gayet, R. 86 (1994) 158
Matsuo, T., see Tawara, H. 86 (1994) 135
Meckbach, W., see Suárez, S. 86 (1994) 172
Meckbach, W., see Suárez, S. 86 (1994) 197
Meyerhof, W.E. and E.C. Montenegro, Two-center electron–electron interaction in projectile electron excitation and loss 86 (1994) 45
Miller, R., see Tóth, L. 86 (1994) 151
Mimault, J., see Traverse, A. 86 (1994) 270
Montenegro, E.C., see Meyerhof, W.E. 86 (1994) 45
Mukoyama, T. and G. Hock, Analytical expressions of potentials and wave functions for atoms and ions 86 (1994) 155
Münzenberg, G., see Pfützner, M. 86 (1994) 213

Nagy, L. and L. Végh, Two-electron processes in ionization of molecular hydrogen 86 (1994) 165
Nakanishi, A., see Fukumura, K. 86 (1994) 387

Narsky, I.V., see Biryukov, V.M. 86 (1994) 245
Nickel, F., see Pfützner, M. 86 (1994) 213

Oganessian, Yu.Ts., see Apel, P. 86 (1994) 325
Okuno, K., see Oura, M. 86 (1994) 190
Olson, R.E., see Tökési, K. 86 (1994) 147
Oura, M., S. Kravis, T. Koizumi, Y. Itoh, T.M. Kojima, M. Sano, T. Sekioka, M. Kimura, K. Okuno and Y. Awaya, Experimental setups for photoionization of multiply charged ions by synchrotron radiation 86 (1994) 190

Pajek, M., see Semaniak, J. 86 (1994) 185
Pálinkás, J., see Závodszky, P.A. 86 (1994) 175
Pálinkás, J., see Plano, V.L. 86 (1994) 181
Parent, M., K. Strijckmans, R. Cornelis, J. Dewaele and R. Dams, Production of ^{191}Pt radiotracer with high specific activity for the development of preconcentration procedures 86 (1994) 355
Parent, P., see Traverse, A. 86 (1994) 270
Pelicon, P., see Tóth, L. 86 (1994) 151
Petukhov, V.P., see Kerkow, H. 86 (1994) 205
Pfützner, M., H. Geissel, G. Münzenberg, F. Nickel, Ch. Scheidenberger, K.-H. Schmidt, K. Sümmerer, T. Brohm, B. Voss and H. Bichsel, Energy deposition by relativistic heavy ions in thin argon absorbers 86 (1994) 213
Plano, V.L., R.R. Haar, J.A. Tanis, J. Pálinkás, L. Sarkadi, P.A. Závodszky, D. Berényi, H. Khemliche, M.H. Prior and D. Schneider, Production of low-energy continuum electrons at 0° by 4.4 keV/u O^{8+} ions 86 (1994) 181
Platonov, Yu.P., see Biryukov, V.M. 86 (1994) 245
Poumellec, B., A. Traverse, S. Artigaud and J. Hervo, Germanium implantation into substrates for integrated optics 86 (1994) 279
Pregliasco, R.G., C.R. Garibotti and R. Barrachina, ECC cusp analysis 86 (1994) 168
Pregliasco, R.G., I. Samengo and R.O. Barrachina, Angular normalization of the electron transfer to the continuum peak 86 (1994) 390
Prior, M.H., see Plano, V.L. 86 (1994) 181

Quivy, A., see Traverse, A. 86 (1994) 270

Rao, D.V., R. Cesareo and G.E. Gigante, L X-ray fluorescence cross sections in the atomic region $46 \leqslant Z \leqslant 51$ excited by 6.47, 7.57 and 8.12 keV photons 86 (1994) 219
Reading, J.F., A.L. Ford, K.A. Hall and E. Lindroth, A review of some selected two electron processes in ion–atom collisions 86 (1994) 38
Remmert, G., see Apel, P. 86 (1994) 325
Ricz, S., Angular dependence of post-collision interactions 86 (1994) 119
Ricz, S., see Tóth, L. 86 (1994) 151
Ricz, S., see Závodszky, P.A. 86 (1994) 175
Rivarola, R., see Gayet, R. 86 (1994) 158
Robaye, G., see Delbrouck-Habaru, J.M. 86 (1994) 394
Roelandts, I., see Delbrouck-Habaru, J.M. 86 (1994) 394
Romanowski, E.A., see Kerkow, H. 86 (1994) 205
Rothard, H., see Tobisch, M. 86 (1994) 143
Rothard, H., see Suárez, S. 86 (1994) 197
Rothman, J.B., see Genzer, J. 86 (1994) 345

Sadowski, M., E.M. Al-Mashhadani, A. Szydłowski, T. Czyżewski, L. Głowacka, M. Jaskóła and M. Wieluński, Investigation on the response of CR-39 and PM-355 track detectors to fast protons in the energy range 0.2–4.5 MeV 86 (1994) 311
Safronova, U.I., see Tolstikhina, I.Yu. 86 (1994) 241
Salin, A., New light on old problems 86 (1994) 1
Samengo, I., see Pregliasco, R.G. 86 (1994) 390
Samlenski, R. and R. Brenn, Quantitative texture and defect analysis of polycrystalline diamond films by ion channeling 86 (1994) 339
Sano, M., see Oura, M. 86 (1994) 190
Sarkadi, L., see Závodszky, P.A. 86 (1994) 175
Sarkadi, L., see Plano, V.L. 86 (1994) 181
Scheidenberger, Ch., see Pfützner, M. 86 (1994) 213
Schmidt, K.-H., see Pfützner, M. 86 (1994) 213

Schmidt, K.-H., see Pfützner, M. 86 (1994) 213
Schneider, D., see Plano, V.L. 86 (1994) 181
Schosnig, M., see Tobisch, M. 86 (1994) 143
Schosnig, M., see Jung, M. 86 (1994) 194
Schosnig, M., see Suárez, S. 86 (1994) 197
Sekioka, T., see Oura, M. 86 (1994) 190
Semaniak, J., J. Braziewicz, T. Czyżewski, L. Głowacka, M. Haller, M. Jaskóła, R. Karschnick, A.P. Kobzev, M. Pajek, W. Kretschmer and D. Trautmann, L-subshell ionization by ^{14}N ions 86 (1994) 185
Shafroth, S.M., see Benhenni, M. 86 (1994) 28
Sheinerman, S.A., Post-collision interaction in inelastic ion–atom scattering 86 (1994) 105
Shlopak, N.V., A.G. Ulyashin and Yu.A. Bumai, Hydrogen effects on the electrical properties of electron-irradiated n-type Si epilayers 86 (1994) 298
Smirnov, A.I., see Biryukov, V.M. 86 (1994) 245
Spohr, R., see Apel, P. 86 (1994) 325
Šťavina, P., see Vojtyla, P. 86 (1994) 380
Steckenreiter, T., see Apel, P. 86 (1994) 325
Stolle, R., see Kerkow, H. 86 (1994) 205
Strijckmans, K., see Parent, M. 86 (1994) 355
Suárez, S., C. Garibotti, G. Bernardi, P. Focke and W. Meckbach, Projectile Coulomb center effects on low-energy electron emission from $H^+ \rightarrow Ne$ collisions 86 (1994) 172
Suárez, S., G. Bernardi, P. Focke, W. Meckbach, M. Tobisch, M. Jung, H. Rothard, M. Schosnig, R. Maier, A. Clouvas and K.O. Groeneveld, Search for Fermi shuttle mechanisms in electron emission from atomic collision sequences 86 (1994) 197
Suarez, S., see Tobisch, M. 86 (1994) 143
Sümmerer, K., see Pfützner, M. 86 (1994) 213
Swenson, J.K., see Benhenni, M. 86 (1994) 28
Szabó, Gy., see Závodszky, P.A. 86 (1994) 175
Szydłowski, A., see Sadowski, M. 86 (1994) 311

Tanis, J.A., see Plano, V.L. 86 (1994) 181
Tansley, T.L., see Alexiev, D. 86 (1994) 288
Tawara, H., T. Tonuma, H. Kumagai and T. Matsuo, Secondary ions produced from condensed rare gas targets under highly charged MeV/amu heavy ion bombardment 86 (1994) 135
Tawara, H., see Tolstikhina, I.Yu. 86 (1994) 241
Thromat, N., see Traverse, A. 86 (1994) 270
Tobisch, M., M. Schosnig, K. Kroneberger, M. Kuzel, R. Maier, M. Jung, C. Fiedler, H. Rothard, A. Clouvas, S. Suarez, D. Hofmann and K.O. Groeneveld, Backscattering of projectile-bound electrons from solid surfaces 86 (1994) 143
Tobisch, M., see Jung, M. 86 (1994) 194
Tobisch, M., see Suárez, S. 86 (1994) 197
Tökési, K., J. Wang and R.E. Olson, Projectile ionization at forward observation angles for intermediate energy H + H collisions 86 (1994) 147
Tökési, K. and G. Hock, Versatility of the exit channels in the three-body CTMC method 86 (1994) 201
Tolstikhina, I.Yu., H. Tawara and U.I. Safronova, K-X-ray satellite energies and radiative probabilities of Ar ions formed under slow Ar^{17+} ions upon metallic surface 86 (1994) 241
Tonuma, T., see Tawara, H. 86 (1994) 135
Toshima, N., see Lin, C.D. 86 (1994) 12
Tóth, L., Gy. Víkor, S. Ricz, P. Pelicon and R. Miller, Study of the Ar LMM spectra by He^+ projectile at 1250 keV, 1500 keV and 2000 keV bombardment energies 86 (1994) 151
Trautmann, C., see Apel, P. 86 (1994) 325
Trautmann, D., see Semaniak, J. 86 (1994) 185
Traverse, A., P. Parent, J. Mimault, N. Thromat, M. Gautier, J.P. Duraud, A.M. Flank, A. Quivy and A. Fontaine, Structural and electronic modifications in ion beam treated yttrium oxide 86 (1994) 270
Traverse, A., see Poumellec, B. 86 (1994) 279
Tsarik, S.V., see Biryukov, V.M. 86 (1994) 245

Ulyashin, A.G., see Shlopak, N.V. 86 (1994) 298

Vajnai, T., see Závodszky, P.A. 86 (1994) 175
Valkovic, V., see Bernasconi, G. 86 (1994) 333

van der Heide, P.A.W., Inverse velocity trends in secondary ion mass spectrometry; a new method for quantification? 86 (1994) 373
Vaněček, M., see Zemek, J. 86 (1994) 293
Végh, L., see Nagy, L. 86 (1994) 165
Vetter, J., see Apel, P. 86 (1994) 325
Víkor, Gy., see Tóth, L. 86 (1994) 151
Vojtyla, P., J. Beer and P. Šťavina, Experimental and simulated cosmic muon induced background of a Ge spectrometer equipped with a top side anticoincidence proportional chamber 86 (1994) 380
Voss, B., see Pfützner, M. 86 (1994) 213

Wang, D.-C., H. Yang and P.-A. Luo, Measurements of the mass attenuation coefficients of tin with characteristic lines from elements excited by energetic protons 86 (1994) 231
Wang, D.-C., H. Yang and X.-M. Wang, Mass attenuation coefficients of indium in the energy range 2.6 to 29.1 keV 86 (1994) 236
Wang, J., see Tökési, K. 86 (1994) 147
Wang, X.-M., see Wang, D.-C. 86 (1994) 236
Weber, G., see Delbrouck-Habaru, J.M. 86 (1994) 394
Westphal, A.J., Y.D. He and P.S. Wojdowski, Apparent binary microscopic response to relativistic ions of a large class of track-etch detectors 86 (1994) 317
Wieluński, M., see Sadowski, M. 86 (1994) 311
Wojdowski, P.S., see Westphal, A.J. 86 (1994) 317

Yang, H., see Wang, D.-C. 86 (1994) 231
Yang, H., see Wang, D.-C. 86 (1994) 236
Yu, Y.C., see Hsu, C.C. 86 (1994) 90

Zapolsky, V.N., see Biryukov, V.M. 86 (1994) 245
Závětová, M., see Zemek, J. 86 (1994) 293
Závodszky, P.A., L. Gulyás, L. Sarkadi, T. Vajnai, Gy. Szabó, S. Ricz, J. Pálinkás and D. Berényi, Cusp shape studies in $H^+ \rightarrow$ He collision in the energy range 75–1400 keV: experiment and theory 86 (1994) 175
Závodszky, P.A., see Plano, V.L. 86 (1994) 181
Železný, V., see Zemek, J. 86 (1994) 293
Zemek, J., F. Černý, M. Závětová, M. Vaněček and V. Železný, Silicon nitride films prepared by high energy ion beam enhanced deposition 86 (1994) 293
Zhao, G., see Feng, Y. 86 (1994) 225
Zhou, Y., see Feng, Y. 86 (1994) 225
Zhou, Z., see Feng, Y. 86 (1994) 225

Nuclear Instruments and Methods in Physics Research B 86 (1994) 407–409
North-Holland

NIM B
Beam Interactions with Materials & Atoms

Subject Index

Basic Data for Materials Modification and Analysis

Energy deposition by relativistic heavy ions in thin argon absorbers, M. Pfützner, H. Geissel, G. Münzenberg, F. Nickel, Ch. Scheidenberger, K.-H. Schmidt, K. Sümmerer, T. Brohm, B. Voss and H. Bichsel 86 (1994) 213
L X-ray fluorescence cross sections in the atomic region $46 \leqslant Z \leqslant 51$ excited by 6.47, 7.57 and 8.12 keV photons, D.V. Rao, R. Cesareo and G.E. Gigante 86 (1994) 219
Cross sections for 165° backscattering of 2.0–9.0 MeV ^{4}He from carbon, Y. Feng, Z. Zhou, Y. Zhou and G. Zhao 86 (1994) 225
Measurements of the mass attenuation coefficients of tin with characteristic lines from elements excited by energetic protons, D.-C. Wang, H. Yang and P.-A. Luo 86 (1994) 231
Mass attenuation coefficients of indium in the energy range 2.6 to 29.1 keV, D.-C. Wang, H. Yang and X.-M. Wang 86 (1994) 236

Atomic Collisions in Solids

Proceedings of the Fifth Workshop on Fast Ion-Atom Collisions (Debrecen, Hungary, 17–19 July, 1993)

I. Invited papers

New light on old problems, A. Salin 86 (1994) 1
Alignment and orientation in atomic collisions, C.D. Lin, N. Toshima and W. Fritsch 86 (1994) 12
New trends in the study of alignment and orientation in ion–atom collisions, N.M. Kabachnik 86 (1994) 20
Alignment effects in fast ion–atom collisions, M. Benhenni, S.M. Shafroth and J.K. Swenson 86 (1994) 28
A review of some selected two electron processes in ion–atom collisions, J.F. Reading, A.L. Ford, K.A. Hall and E. Lindroth 86 (1994) 38
Two-center electron–electron interaction in projectile electron excitation and loss, W.E. Meyerhof and E.C. Montenegro 86 (1994) 45
Resonant and non-resonant modes of transfer and excitation processes in ion–atom collisions, R. Gayet and J. Hanssen 86 (1994) 52
Double charge exchange at high impact energies, Dž. Belkić 86 (1994) 62
The importance of continuum eigenstates in electron spectroscopy, D.H. Jakubaßa-Amundsen 86 (1994) 82
Shape studies of ELC and ECC cusps, C.C. Hsu and Y.C. Yu 86 (1994) 90
Continuum states in ion–atom collisions, C.R. Garibotti and R.O. Barrachina 86 (1994) 96
Post-collision interaction in inelastic ion–atom scattering, S.A. Sheinerman 86 (1994) 105
Angular dependence of post-collision interactions, S. Ricz 86 (1994) 119
Post-collisional interaction in ion–atom collisions, Dž. Belkić 86 (1994) 127

II. Contributed papers

Secondary ions produced from condensed rare gas targets under highly charged MeV/amu heavy ion bombardment , H. Tawara, T. Tonuma, H. Kumagai and T. Matsuo 86 (1994) 135
Parametric analysis of the soft electron emission in ion–helium collisions, W.R. Cravero, C.R. Garibotti and G. Gasaneo 86 (1994) 140
Backscattering of projectile-bound electrons from solid surfaces, M. Tobisch, M. Schosnig, K. Kroneberger, M. Kuzel, R. Maier, M. Jung, C. Fiedler, H. Rothard, A. Clouvas, S. Suarez, D. Hofmann and K.O. Groeneveld. 86 (1994) 143

0168-583X/94/$07.00 © 1994 – Elsevier Science B.V. All rights reserved

Projectile ionization at forward observation angles for intermediate energy H + H collisions, K. Tökési, J. Wang and R.E. Olson 86 (1994) 147
Study of the Ar LMM spectra by He^+ projectile at 1250 keV, 1500 keV and 2000 keV bombardment energies, L. Tóth, Gy. Víkor, S. Ricz, P. Pelicon and R. Miller 86 (1994) 151
Analytical expressions of potentials and wave functions for atoms and ions, T. Mukoyama and G. Hock 86 (1994) 155
Double electron capture in ion–atom collisions at high impact velocities, R. Gayet, J. Hanssen, A. Martinez and R. Rivarola 86 (1994) 158
The influence of projectile electron–target electron interactions on electron emission in fast ionizing collisions, R.D. DuBois and S.T. Manson 86 (1994) 161
Two-electron processes in ionization of molecular hydrogen, L. Nagy and L. Végh 86 (1994) 165
ECC cusp analysis, R.G. Pregliasco, C.R. Garibotti and R. Barrachina 86 (1994) 168
Projectile Coulomb center effects on low-energy electron emission from $H^+ \rightarrow$ Ne collisions, S. Suárez, C. Garibotti, G. Bernardi, P. Focke and W. Meckbach 86 (1994) 172
Cusp shape studies in $H^+ \rightarrow$ He collision in the energy range 75–1400 keV: experiment and theory, P.A. Závodszky, L. Gulyás, L. Sarkadi, T. Vajnai, Gy. Szabó, S. Ricz, J. Pálinkás and D. Berényi 86 (1994) 175
Production of low-energy continuum electrons at 0° by 4.4 keV/u O^{8+} ions , V.L. Plano, R.R. Haar, J.A. Tanis, J. Pálinkás, L. Sarkadi, P.A. Závodszky, D. Berényi, H. Khemliche, M.H. Prior and D. Schneider . . 86 (1994) 181
L-subshell ionization by ^{14}N ions, J. Semaniak, J. Braziewicz, T. Czyżewski, L. Głowacka, M. Haller, M. Jaskóła, R. Karschnick, A.P. Kobzev, M. Pajek, W. Kretschmer and D. Trautmann 86 (1994) 185
Experimental setups for photoionization of multiply charged ions by synchrotron radiation, M. Oura, S. Kravis, T. Koizumi, Y. Itoh, T.M. Kojima, M. Sano, T. Sekioka, M. Kimura, K. Okuno and Y. Awaya 86 (1994) 190
Charge state analysis of heavy ions after penetration of uncleaned and sputter cleaned conducting surfaces, M. Jung, M. Schosnig, K. Kroneberger, M. Tobisch, R. Maier, M. Kuzel, C. Fiedler, D. Hofmann and K.O. Groeneveld 86 (1994) 194
Search for Fermi shuttle mechanisms in electron emission from atomic collision sequences, S. Suárez, G. Bernardi, P. Focke, W. Meckbach, M. Tobisch, M. Jung, H. Rothard, M. Schosnig, R. Maier, A. Clouvas and K.O. Groeneveld 86 (1994) 197
Versatility of the exit channels in the three-body CTMC method, K. Tökési and G. Hock 86 (1994) 201
Convoy electron and ion scattering distributions after penetration of protons through thin foils, H. Kerkow, V.P. Petukhov, E.A. Romanowski and R. Stolle 86 (1994) 205

III. Closing remarks

Observations on fast ion–atom collisions, S.T. Manson 86 (1994) 210

K-X-ray satellite energies and radiative probabilities of Ar ions formed under slow Ar^{17+} ions upon metallic surface, I.Yu. Tolstikhina, H. Tawara and U.I. Safronova 86 (1994) 241
On measuring 70 GeV proton dechanneling lengths in silicon crystals (110) and (111), V.M. Biryukov, Yu.A. Chesnokov, N.A. Galyaev, V.I. Kotov, I.V. Narsky, S.V. Tsarik, V.N. Zapolsky, O.L. Fedin, M.A. Gordeeva, Yu.P. Platonov and A.I. Smirnov 86 (1994) 245
On the multiple scattering of linearly polarized gamma rays, F. Bell 86 (1994) 251
Plural and multiple small-angle scattering from a screened Rutherford cross section, A.F. Bielajew 86 (1994) 257
Angular normalization of the electron transfer to the continuum peak, R.G. Pregliasco, I. Samengo and R.O. Barrachina *(Letter to the Editor)* 86 (1994) 390

Ion Beam Modification of Materials

Structural and electronic modifications in ion beam treated yttrium oxide, A. Traverse, P. Parent, J. Mimault, N. Thromat, M. Gautier, J.P. Duraud, A.M. Flank, A. Quivy and A. Fontaine 86 (1994) 270
Germanium implantation into substrates for integrated optics, B. Poumellec, A. Traverse, S. Artigaud and J. Hervo 86 (1994) 279
Neutron transmutation doping of liquid phase epitaxial gallium arsenide, D. Alexiev, K.S.A. Butcher, M. Edmondson and T.L. Tansley 86 (1994) 288
Silicon nitride films prepared by high energy ion beam enhanced deposition, J. Zemek, F. Černý, M. Závětová, M. Vaněček and V. Železný 86 (1994) 293

Effects of Radiation

Hydrogen effects on the electrical properties of electron-irradiated n-type Si epilayers, N.V. Shlopak, A.G. Ulyashin and Yu.A. Bumai 86 (1994) 298
Determination of the energy limits and efficiency of track detectors for the formation of etched through tracks, S.R. Hashemi-Nezhad 86 (1994) 303
Investigation on the response of CR-39 and PM-355 track detectors to fast protons in the energy range 0.2–4.5 MeV, M. Sadowski, E.M. Al-Mashhadani, A. Szydłowski, T. Czyżewski, L. Głowacka, M. Jaskóła and M. Wieluński 86 (1994) 311
Apparent binary microscopic response to relativistic ions of a large class of track-etch detectors, A.J. Westphal, Y.D. He and P.S. Wojdowski 86 (1994) 317
Solvent induced track sensitization. Extraction of oligomers, P. Apel, N. Angert, W. Brüchle, H. Hermann, U. Kampschulte, P. Klein, L.I. Kravets, Yu.Ts. Oganessian, G. Remmert, R. Spohr, T. Steckenreiter, C. Trautmann and J. Vetter 86 (1994) 325

Analysis of Materials

Applications of a capillary based X-ray microfluorescence system, G. Bernasconi, N. Haselberger, A. Markowicz and V. Valkovic 86 (1994) 333
Quantitative texture and defect analysis of polycrystalline diamond films by ion channeling, R. Samlenski and R. Brenn 86 (1994) 339
Improved hydrogen and deuterium depth profiling in polymers using low energy forward recoil spectrometry, J. Genzer, J.B. Rothman and R.J. Composto 86 (1994) 345
Production of ^{191}Pt radiotracer with high specific activity for the development of preconcentration procedures, M. Parent, K. Strijckmans, R. Cornelis, J. Dewaele and R. Dams 86 (1994) 355

Experimental Methods and Equipment

Pascal's triangle and the simulation of backscattering spectra, M. Bozoian 86 (1994) 367
Inverse velocity trends in secondary ion mass spectrometry; a new method for quantification?, P.A.W. van der Heide 86 (1994) 373
Experimental and simulated cosmic muon induced background of a Ge spectrometer equipped with a top side anticoincidence proportional chamber, P. Vojtyla, J. Beer and P. Šťavina 86 (1994) 380
Hydrogen-filled proportional counter operated at low temperatures and its application to CEMS, K. Fukumura, A. Nakanishi and T. Kobayashi 86 (1994) 387

Letter to the Editor

Angular normalization of the electron transfer to the continuum peak, R.G. Pregliasco, I. Samengo and R.O. Barrachina 86 (1994) 390

Erratum

Erratum to: "Determination of the best experimental conditions for using the α parameters method to calculate matrix corrections for infinitely thick targets (TTPIXE)". [Nucl. Instr. and Meth. B 73 (1993) 71], J.M. Delbrouck-Habaru, G. Weber, P. Aloupogiannis, G. Robaye and I. Roelandts 86 (1994) 394